

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Assignee: Versata Development Group, Inc.
Title: Session-Based Processing Method And System
Serial No.: 10/796,317 Filed: March 9, 2004
Examiner: Shyue Jiunn Hwa Group Art Unit: 2163
Docket No.: T00107 Customer No.: 33438

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PRE-APPEAL BRIEF REQUEST FOR REVIEW AND STATEMENT OF REASONS

Sir:

Applicants request review of the Final Office Action dated September 2, 2009 in this application. No amendments are being filed with the request. This request is being filed with a Notice of Appeal. The following sets forth a succinct, concise, and focused set of arguments for which the review is being requested.

CLAIM STATUS

In the Final Office Action, claims 1-7, 11, and 13-19 were rejected as obvious over U.S. Patent No. 7,107,338 to Nareddy and U.S. Publication No. 20020016771 to Carothers; and claims 8-10, 12, and 20 were rejected as obvious over Nareddy, Carothers and U.S. Publication No. 20040221311 to Dow et al. As explained below, Applicants respectfully traverse the rejections.

A. Claims 1-20 Are Not Obvious Over the Cited Art References

Claims 1-20 variously recite a method, article of manufacture, or system for grouping and processing log file entries using a memory window or ring buffer to select a “subset” of the log file entries, and then identifying log file entries in the subset that belong to a complete session.¹ In

¹ Claim 1 states that, after retrieving a “subset of log file entries from the memory,” each entry is processed “to identify entries in the subset of log file entries that belong to a complete client session.” Similarly, claim 8 requires reading “a plurality of records... into a ring buffer, where said plurality of records comprises a subset of all records in the file system,” scanning “each record in the ring buffer” to identify a user session, allocating an index “to identify all records in the ring buffer that are associated with the identified user session,” and processing the index “to group all records in the ring buffer belonging to a complete user session.”). Likewise, claim 11 recites a “processing engine to process a subset of the plurality of server request entries to group the server request entries by session using the session identifier in each server request entry” and claim 18 recites a means for “reading a subset of the network session data,” “processing the subset of the network session data to group said network session data by session,” and “generating a first output file containing network session data grouped by session.”

selected claims, complete user sessions from the log file entries are identified and grouped by processing only a subset of the log file entries at a time using a “sliding window” or “ring buffer” to read log files. *See*, claims 8-10, 12-13, and 18-20. By processing the “subset of log file entries” at any one time, only a portion of the log file is loaded into memory window to identify entries in the subset of log file entries that belong to a complete client session without reading all of the log file entries. Thus, each claim requires that a “subset of log file entries” (claim 1), “a plurality of records from a file system into a ring buffer, where said plurality of records comprises a subset of all records” (claim 8), “a subset of the plurality of server request entries” (claim 11), or “subset of the network session data” (claim 18) be processed to identify and group the entries/records/data from the subset by session.

In response to the various rejections of claims 1-20 as being obvious, Applicants respectfully request reconsideration and withdrawal of the rejections because the cited art fails to disclose Applicants’ scheme for retrieving and processing “a subset of log file entries” using a memory window to select a subset of the log file records for identifying complete session records that may be analyzed or parsed, and for otherwise identifying incomplete session records for subsequent processing. To the contrary, the cited art clearly and explicitly discloses processing “**all log entries**,” one log entry at a time, and never discloses or suggests storing a subset of the log file entries (e.g., in a “sliding memory window” or “ring buffer”) so that complete sessions in the subset of log file entries may be identified and grouped for processing without having to make a complete copy of the log file. Indeed, the very Nareddy passage (Nareddy col. 13, lines 10-60) cited to meet the requirement of “processing each entry in the memory to identify entries in the subset of log file entries that belong to a complete client session” (Office Action, pp. 10-11) explicitly states that “[t]he routine processes **each entry in the log file** based on the parser configuration data.” This is confirmed in the “Response to Arguments” section with the Examiner’s assertion that “Nareddy teaches the routine process each entry in the log file based on the parser configuration data.” Office Action, p. 3 (emphasis in original). And as shown herein, the associated

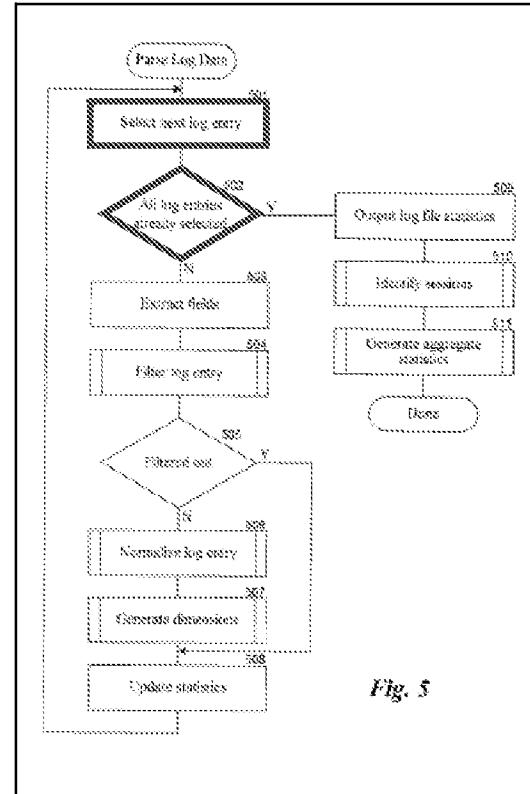


Fig. 5

Nareddy drawing (Figure 5) also shows that “**all log entries**” are parsed, on log entry at a time.

Indeed, once the flow diagram shown in Figure 5 and associated description at Nareddy col. 13, lines 10-60 are properly understood to provide the overall organization for the remainder of Nareddy’s disclosure, it becomes clear that the other cited Nareddy passages do not meet the claim requirements. For example, Figure 5 shows that, for each log entry, a “generate dimensions routine” 507 is run to update the dimension tables, where Figure 8 shows that the “generate dimensions routine” includes the “identify page type” and “identify events” routines that are described and depicted with reference to Figures 11 and 23 (“Identify Page Type Routine”) and Figures 12 and 24 (“Identify Events Routine”). To the extent that the rejection analysis relies on Nareddy’s description of Figure 23 at col. 49 (lines 33-58) to meet claim 1’s requirement of “retrieving a subset of log file entries from the memory,” this reliance is clearly misplaced insofar as “identify page routine” is clearly being run on “all log entries,” one log entry at a time.

But an even more fundamental problem with Nareddy’s disclosure is that the referenced “subset of the version groups” (col. 49, lines 33-58) cited in the rejection analysis (Office Action, p. 10) is referring to version groups for the “retrieved category type definition information,” and in no way discloses or suggests “retrieving a subset of log file entries from the memory” as claimed. The presence of the word “subset” in the cited Nareddy passage (col. 49, lines 33-58) refers to “version groups,” and simply does not meet the claim requirement of “retrieving a subset of log file entries from the memory” (claim 1), reading “a plurality of records from a file system into a ring buffer, where said plurality of records comprises a subset of all records in the file system” (claim 8), processing “a subset of the plurality of server request entries” (claim 11), or “processing the subset of the network session data to group said network session data by session” (claim 18).

As seen from the foregoing, Nareddy is quite explicit that “all log entries” are processed by the Nareddy’s “identify sessions routine,” and there is no attempt made to separate out a “subset” of entries for processing to identify complete user sessions. Instead, Nareddy teaches that the identify sessions routine is only run after “all log entries” have already been parsed. *See*, Nareddy’s Figures 5 and 13 and col. 16, line 47-col. 17, line 3. Nothing in Carothers or Dow overcomes this deficiency. Indeed, the cited art combination merely typifies conventional approaches for processing all of the log entries to extract session data, such as described and distinguished by Applicants in the Background of Invention section. *See*, Application, paragraph 14 (“For large log files that are larger than the amount of available random access memory (“RAM”), the grouping of log file entries by session can use a lot of computational resources. For example, conventional grouping techniques involve reading the log file, request-by-request, and sorting the requests into a

new file, set of files, database, or index on the file system that is structured to make locating requests in the same session fast. For example, the log files could be imported into a table in a database where each line in the log file is imported as a single record in the database, and where one of the fields in the database record identifies the session the request belongs to. With this arrangement, standard database techniques can be used to sort the table by the session field and then read the records out of the database in session field order. However, this technique requires creating an extra copy of the log file and also significant processing speed penalties in the time required for extracting data from the log files for storage in a database.”).

The foregoing deficiencies with respect to the independent claims are sufficient to overcome the cited art references. However, the deficiencies in the dependent claim analysis are even more glaring. For example, claim 10 recites that “the ring buffer implements a sliding window to process all of the log records in the file system into complete user sessions by sequentially adding and removing log records to the ring buffer until all of the log records in the file system have been processed.” To meet this claim requirement, the rejection analysis cites Nareddy’s disclosure (col. 21, lines 30-40) of a web browser display window 1970 shown in Figure 19U and Dow’s teaching of an “event buffer module.” *See, Office Action*, p. 32. With all due respect, Applicants submit that the cited Nareddy disclosure nowhere discloses or suggests the claim requirements for implementing a sliding window to process all of the log records in the file system into complete user sessions, as readily seen from the cited passage set forth below:

In the illustrated embodiment, a user digimineqa from the Quality Assurance department of digiMine provides the appropriate access information on the web page illustrated in FIG. 19T and, after interacting with the web site by selecting the “submit” button, receives the web page 1972 illustrated in FIG. 19U. This web page is shown displayed within a web browser display window 1970. The displayed web page includes multiple frames that are each able to display different content, including a control frame 1979 with various user-selectable controls 1977 and display frames 1975 in which customer-specific information is displayed. In the illustrated embodiment, the URL indication 1920 corresponds to the information displayed in the display frames. The path portion of the indicated URL specifies an executable Active Server Page (“ASP”) program on the server that will supply the content displayed in the display frames, and the indicated URL also includes a query string portion that will be supplied as input to the executable program.

Nareddy, col. 21, lines 30-40. The cited Nareddy disclosure appears to be wholly disconnected from the claim requirements, and there is nothing in Dow to remedy this deficiency. The same deficiency applies to the rejection analysis for claims 13 and 19.

In view of the failure to establish a *prima facie* case of obviousness over Nareddy and Carothers (alone or in combination with Dow) such as explained above, Applicants respectfully

submit that the Examiner has incorrectly applied the legal requirements for establishing obviousness. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). This has not been done. At best, the cited combination of references discloses grouping transactions by transaction. There is no disclosure or suggestion in Nareddy and Carothers or Dow of using a session-based scheme for grouping and processing log file entries using a memory window to select a subset of the log file records, and then process the subset records to identify or group the subset records by session. Accordingly, Applicants respectfully request that the obviousness rejection of claims 1-20 be withdrawn and that the claims be allowed.

CONCLUSION

For at least the foregoing reasons, Applicants submit that the rejection of the pending claims should be removed and these claims should be allowed. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned at (512) 338-9100.

CERTIFICATE OF TRANSMISSION

I hereby certify that on January 4, 2010, this correspondence is being transmitted via the U.S. Patent & Trademark Office's electronic filing system.

/Michael Rocco Cannatti/

Respectfully submitted,

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